

Listing of Claims

1. (Currently Amended) A method of controlling a packet ~~terminating~~ call in a mobile communication system, comprising:

registering packet ~~terminating~~ call filtering information for at least one subscriber, the packet call filtering information including a plurality of combinations of packet-pattern attributes, each combination assigned a different security classification and including different arrangements of said attributes;

if a packet addressed to the subscriber as a destination is received, determining whether to set a ~~terminating~~ call connection of the received packet based on a comparison of attribute information of the received packet and the plurality of combinations of packet-pattern attributes included in the registered packet ~~terminating~~ call filtering information; and

setting the ~~terminating~~ call connection according to a result of determination.

2. (Currently Amended) The method of claim 1, wherein the packet ~~terminating~~ call filtering information includes information indicating whether to activate use of a packet ~~terminating~~ call filtering function.

3. (Currently Amended) The method of claim 1, wherein the packet ~~terminating~~ call filtering information includes information indicating whether the packet ~~terminating~~ call filtering information includes a non-permission condition or a permission condition.

4. (Canceled)

5. (Currently Amended) The method of claim 1 [[4]], wherein the packet-pattern ~~attributes include information includes~~ at least one of a specified source Internet protocol (IP), a specified protocol identifier (ID), or ~~and~~ a destination port number.

6. (Currently Amended) The method of claim 1 [[4]], wherein the ~~attribute packet pattern~~ information ~~includes at least one of a plurality of packet attributes~~ is recorded in a header of the received [[a]] packet.

7. (Currently Amended) The method of claim 6, wherein the packet-pattern ~~attributes include includes~~ a source address and subnet mask.

8. (Currently Amended) The method of claim 6, wherein the packet-pattern ~~attributes include includes~~ a protocol number (IPv4)[[/]] and a next header (IPv6).

9. (Currently Amended) The method of claim 6, wherein the packet-pattern attributes include ~~includes~~ a destination port range.

10. (Currently Amended) The method of claim 6, wherein the packet-pattern attributes include ~~includes~~ a source port range.

11. (Currently Amended) The method of claim 6, wherein the packet-pattern attributes include ~~includes~~ an IPSec security parameter index (SPI).

12. (Currently Amended) The method of claim 6, wherein the packet-pattern attribute-patterns include ~~includes~~ a type of service (TSO) (IPv4)[[/]] and a traffic class (IPv6) and mask.

13. (Currently Amended) The method of claim 6, wherein the packet-pattern attributes include ~~includes~~ a flow label (IPv6).

14. (Currently Amended) The method of claim 1, wherein the packet ~~terminating~~ call filtering information is included in static information of a gateway general radio service (GPRS) support node (GGSN).

15. (Currently Amended) The method of claim 1, wherein ~~the step of~~ registering the packet ~~terminating~~ call filtering information comprises:

receiving a packet ~~terminating~~ call filtering information message from a mobile terminal of the subscriber; and

registering the packet ~~terminating~~ call filtering information based on the received message.

16. (Currently Amended) The method of claim 1, further comprising:

receiving a packet ~~terminating~~ call filtering information inquiry and/or update message from a mobile terminal of a subscriber;

inquiring and/or updating the registered packet ~~terminating~~ call filtering information based on the inquiry and/or update message; and

transferring a result of inquiry and/or update to the mobile terminal.

17. (Currently Amended) The method of claim 1, wherein ~~the step of~~ registering the packet ~~terminating~~ call filtering information comprises:

authenticating a subscriber connected through the Internet;

receiving the packet ~~terminating~~ call filtering information message from the authenticated subscriber; and

registering the packet ~~terminating~~ call filtering information based on the received message.

18. (Currently Amended) The method of claim 1, further comprising:
receiving a packet ~~terminating~~ call filtering information inquiry and/or update message from an authenticated subscriber;
inquiring and/or updating the packet ~~terminating~~ call filtering information based on the inquiry and/or update message; and
transferring a result of inquiry and/or update to the authenticated subscriber.

19. (Currently Amended) An apparatus for controlling a packet ~~terminating~~ call in a mobile communication system, comprising:
a database which stores routing information and filtering information of a protocol data unit for a packet radio service, the filtering information including a plurality of combinations of packet-pattern attributes, each combination assigned a different security classification and including different arrangements of said attributes;;
a ~~terminating~~ call control section which controls a ~~terminating~~ call connection setting procedure for the protocol data unit based on the routing information and the filtering

information, the call control section comparing attribute information of the protocol data unit to the plurality of combinations of packet-pattern attributes;

a message processing section which performs an inquiry and/or update of the filtering information based on an inquiry message and/or update message of the filtering information; and

an Internet protocol processing section which processes the protocol data unit and performs the ~~terminating~~ call connection setting procedure under control of the ~~terminating~~ call control section.

20. (Currently Amended) The apparatus of claim 19, further comprising:

an agent for providing the inquiry message and/or update message of the filtering information from an Internet subscriber or ~~and/or~~ a mobile terminal; and

an Internet host, connected between the agent and the Internet, for enabling the Internet subscriber and/or mobile terminal to connect to the agent.

21. (New) The method of claim 1, wherein the plurality of combinations include different numbers of the same packet-pattern attributes or different arrangements of different packet-pattern attributes.

Serial No. 10/634,910

Docket No. K-0528

Amdt. dated July 30, 2007

Reply to Office Action of May 1, 2007

22. (New) The apparatus of claim 19, wherein the plurality of combinations include different numbers of the same packet-pattern attributes or different arrangements of different packet-pattern attributes.

Serial No. 10/634,910
Amdt. dated July 30, 2007
Reply to Office Action of May 1, 2007

Docket No. K-0528

Amendments to the Drawings

Replacement Sheets for Figures 1, 2, and 7 have been submitted with this paper.